

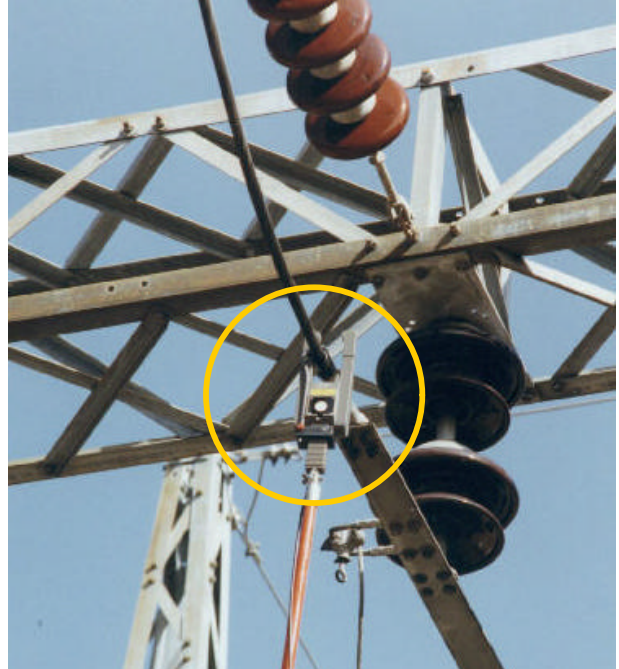
# Spinlab

## 1500 SERIES

# Fiber Optic High Voltage Current Probe Kit

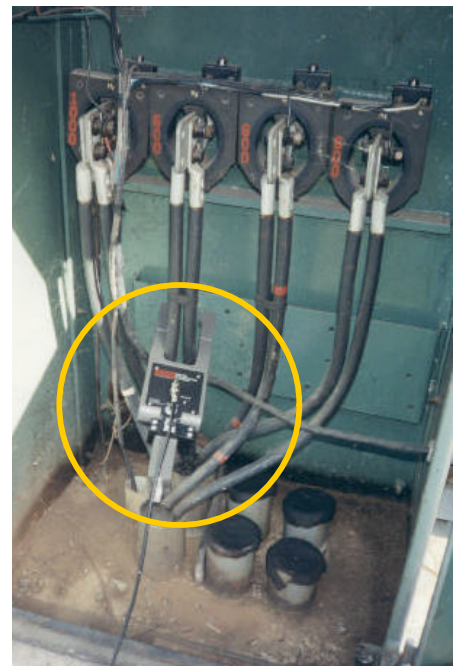
Accurate and reliable performance data are difficult to acquire safely, particularly in the hostile high voltage environment encountered in utility distribution systems. Consequently, in-service testing of distribution systems, including CT rated primary metering components quite often is neglected, allowing improper installation, environmental damage, magnetization and manufacturing defects to go undetected. This can result in serious metering deficiencies --- problems that can add up to critical kilowatt-hour losses to the utility.

The 1500 Series Fiber Optic High Voltage Current Probe safely interfaces with the Spinlab 5000 Series Current Transformer Field Tester, the Bird Dog Plus, to provide the essential current measurements that cost-conscious utilities need today. With the 1500 it is now possible to make in-service ratio, polarity and burden tests on primary metering CT's.



## Features:

- Portable, easily installed on energized lines from the ground using a hot stick.
- Compact, lightweight – less than 3 lbs. Including removable hanging fixture.
- Range: 2-2,000 Amps (Auto range or Manual Select)
- Broad Bandwidth (10kHz)
- Accuracy: 1% of reading + one digit
- Uses non-saturable, non-closing tuning fork core design.
- Provides both phase and amplitude data on the 5000 Series Bird Dog Plus.
- Fiber optic link BIL tested to 230 kV, leakage tested to 765 kV.
- Fiber optics immune to HV arcing and corona.
- Battery powered with auto shutdown feature (5-minute in idle.)
- Fiber cable detachable for easy cleaning, maintenance and safety testing.
- In use with over 75 power utilities throughout the United States.
- Backed by over 5 years experience in high voltage fiber optics.
- Size: 14 inches long, 4.75 inches wide, 2 inches thick.
- Voltage Rating: to 69 kV (230 kV-SPECIAL).



## Specifications

<b>Type:</b>	Portable, shotgun stick mounted using universal chuck Isolated from ground using fiber optic technology
<b>Probe Size:</b>	14 inches x 4.75 inches x 2 inches
<b>Measurement Window Size:</b>	2.5 inches x 3 inches 2-inch opening
<b>Weight:</b>	Less than 3 pounds
<b>Power:</b>	Standard 9 v replaceable battery
<b>Measurement Range:</b>	2-200 Amps 200-2000 Amps (Auto ranges 2-2000 Amps)
<b>Accuracy:</b>	1% of reading +/- 1 digit
<b>Communications:</b>	Optical, using pulse with modulation techniques

## Fiber Optic Communications Link Electrical Isolation Capability

### Voltage Qualifications

Fully tested using ANSI C57.13 --- to BIL equivalent of 230 kV (pulse tested at 1,250 kV).

### Leakage Current Data

Tested at all line-to-line and line-to-ground distribution and transmission voltages up to and including 765 kV-ac.

Measured leakage current was less than 0.050 microamperes / foot / kV.

Distances measured along Fiber Optic Communications Link were minimum line-to-line distances specified by the National Electrical Code. Wet tested per IEEE standard 4, paragraph 1.3.3.2 (250 ml/minute).

## Benefits

**Utilities can now conduct complete in-service tests of primary metering CT's --- their highest volume customers.** These customers account for the highest revenue losses from faulty CT's and CT circuits, yet before the advent of this product were not easily tested without removing the CT from service.

**Eliminates the requirement for a bucket truck** when testing aerially mounted CT's. The very low weight of the probe and the removable hanger attachment allow one man to place the probe using a lightweight shotgun stick.

The compact design and wide opening **allow the probe to be used in confined pad-mount and underground installations.**

**Usable from the lowest line voltages 120 v to 230 kV --- one easy-to-use probe can do it**

## System Includes

- High Voltage Probe
- Safety Barrier Ground Strap
- Receiver/Interface for 5000 Series
- 50 foot Fiber Optic Communications Cable
- Fiber Optic Cable Cleaning Kit
- Carrying Case
- Removable Probe Hanger

**Pricing includes calibration of customer's 5000 Series Bird Dog Plus to the 1500 Series High Voltage Probe.**

**Additional 50-foot standard lengths up to 150 feet can be used with SMA adaptors.**

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The logo for Spinlab, featuring the word "Spinlab" in a bold, white, sans-serif font centered within a solid black rectangular background.